

WHAT IS CLAIMED IS:

1. An immunogenic preparation of whole organisms, wherein said preparation is comprised of whole organisms inactivated by at least a factor of 10^6 with carbon dioxide at or near its supercritical pressure and temperature conditions.
2. The preparation of claim 1 which is comprised of at least 10^6 whole organisms.
3. The preparation of claim 1 or 2 which is comprised of at least 10 nanograms protein of said whole organisms per milliliter.
4. The preparation of any one of claims 1-3 which is comprised of two or more different pathogenic microbes.
5. The preparation of any one of claims 1-4, wherein said organisms are one or more pathogenic microbes selected from the group consisting of bacteria, viruses, fungi, protozoa, and helminths.
6. The preparation of any one of claims 1-5 further comprising an adjuvant.
7. The preparation of claim 6, wherein said adjuvant is selected from the group consisting of aluminum or calcium gels, bacterial toxins, cytokines, genes encoding cytokines, muramyl peptides, and saponins.
8. The preparation of any one of claims 1-7 further comprising an antibiotic.
9. A method of making an immunogenic preparation, wherein said method comprises contacting whole organisms with a fluid comprised of carbon dioxide at or near its supercritical pressure and temperature conditions such that said whole organisms are inactivated by at least a factor of 10^6 to provide said immunogenic preparation.

10. The method of claim 9, wherein said fluid is further comprised of a chemical additive.

11. The method of claim 10, wherein said chemical additive is a peroxide or a carboxylic acid.

12. The method of claim 10, wherein said chemical additive is an alkanecarboxylic acid and/or an alkanepercarboxylic acid, each of which may optionally include one or more electron-withdrawing halogen, oxygen, or nitrogen groups substituted at the alpha carbon thereof.

13. The method of claim 10, wherein said chemical additive is at least one selected from the group consisting of hydrogen peroxide, acetic acid, peracetic acid, and trifluoroacetic acid.

14. The method of claim 13, wherein the chemical additive is at least a mixture of acetic acid, hydrogen peroxide, and peracetic acid.

15. The method of any one of claims 10-14, wherein said chemical additive is present in a volume of said fluid from 0.001% to 2.0%.

16. The method of any one of claims 9-15 further comprising growing said whole organisms to at least 10^6 prior to their inactivation.

17. A method of immunization, wherein said method comprises administering to a subject in need thereof an immunogenic preparation of whole organisms, wherein said preparation is comprised of whole organisms inactivated by at least a factor of 10^6 with carbon dioxide at or near its supercritical pressure and temperature conditions.

18. The method of claim 17, wherein said preparation is further comprised of an adjuvant.

19. The method of claim 18, wherein said adjuvant is selected from the group consisting of aluminum or calcium gels, bacterial toxins, cytokines, genes encoding cytokines, muramyl peptides, and saponins.

20. The method of any one of claims 17-19, wherein said subject is further administered one or more antibiotics and/or antibodies.